

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/849,605	9,605 05/20/2004		Mark L. Schirmer	2550/A18	6733	
2101	7590	04/05/2006		EXAM	EXAMINER	
	G & SUNS	TEIN LLP	KWOK, HELEN C			
125 SUMME BOSTON, N	ER STREET 1A 02110-16	518	•	ART UNIT	PAPER NUMBER	
				2856		
				DATE MAILED: 04/05/2006	DATE MAILED: 04/05/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/849,605	SCHIRMER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Helen C. Kwok	2856					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
<ol> <li>Responsive to communication(s) filed on <u>21 Fe</u></li> <li>This action is <b>FINAL</b>. 2b) This</li> <li>Since this application is in condition for allowant closed in accordance with the practice under E</li> </ol>	action is non-final. nce except for formal matters, pro						
Disposition of Claims							
4)  Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-22 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	vn from consideration.	·					
Application Papers							
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examiner	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:						

#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2006 has been entered.

#### Claim Objections

2. Claims 1-20 are objected to because of the following informalities. Appropriate correction is required.

In claim 1, line 7, what is the word "it" referring to?
In claim 10, line 8, what is the word "it" referring to?
In claim 16, line 6, what is the word "it" referring to?

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7, 10-13, 15-17 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by either U.S. Patent 4,823,602 (Christensen, Jr.) or U.S. Patent 6,435,902 (Groh et al.).

With regards to claims 1-5 and 7, the references, Christensen, Jr. and Groh et al., discloses a sensor mount comprising a fastener 30;10 (i.e. bolt) having a plurality of surfaces wherein the fastener has an outer surface with at least one thread 32;16 and a shaft forming an interior surface is being directly coupleable with an object (i.e. machine casing); a motion sensor 14;25 (i.e. accelerometer or gyroscope) secured to one of the plurality of surfaces of the fastener or to the interior surface such that the motion sensor includes a package does not move in any direction with respect to the surface of the fastener to which it is secured. (See, Figures 1-6, column 2, line 18 to column 4, line 8 of Christensen, Jr. et al.; Figures 1-4, column 2 line 22 to column 3, line 65 of Groh et al.)

With regards to claims 10-13, 15-17 and 20-21, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

5. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,947,690 (Cleveland).

Cleveland discloses an acceleration measurement system comprising, as illustrated in Figures 1-4, a fastener 18 having an interior wherein the fastener being directly coupleable with an object 12; a motion sensor 10 (i.e. an accelerometer) within the interior of the fastener. (See, column 1, line 61 to column 2, line 24).

6. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,202,491 (McCarty et al.).

McCarty et al. discloses an acceleration measurement system comprising, as illustrated in Figures 1-17, a fastener 14 having a plurality of surfaces wherein the fastener being directly coupleable with an object 10; a motion sensor 23 secured to one of the plurality of surfaces of the fastener such that the motion sensor does not move in any direction with respect to the surface of the fastener to which it is secured. (See, column 4, lines 8-54).

With regards to claims 2-9, the motion sensor comprises a package 21 (i.e. a housing) which is secured to one of the plurality of surfaces of the fastener wherein the fastener 14 has an outer surface with at least one thread 86 and a shaft (as observed in figure 8a) forming an interior surface (i.e. a bore/hole 110) such that the motion sensor is secured to the interior surface filled with a fill material (i.e. an epoxy) or an exterior surface such that the motion sensor is secured to the exterior surface; and the motion sensor has a sense axis and the fastener has a longitudinal axis wherein the sense axis is aligned either parallel to the longitudinal axis; and connect detection circuitry. (See, column 9, lines 11-47; column 10, lines 13-39; column11, lines 4-65; column 12, lines 14-26).

With regards to claims 10-22, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

## Response to Amendment

7. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references cited are related to different sensor mounts.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen C. Kwok whose telephone number is (571) 272-2197. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Helen C. Kwok Art Unit 2856

hck March 31, 2006